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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,727	07/19/2002	Peter Knoll	10191/2289	4483
26646	7590	11/20/2006	EXAMINER	
KENYON & KENYON LLP ONE BROADWAY NEW YORK, NY 10004			SEVER, ANDREW T	
			ART UNIT	PAPER NUMBER
			2851	

DATE MAILED: 11/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/088,727

Applicant(s)

KNOLL ET AL.

Examiner

Andrew T. Sever

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/15/2006 and Decision of 9/22/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-22, 32-39 and 41 is/are rejected.
- 7) ☒ Claim(s) 23-31, 40 and 42 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

1. In view of the decision rendered by the Board of Patent Appeals and Interferences on 9/22/2006 and newly discovered reference to the Yazaki Corporation (GB 2 269 681 A.) as outlined below, the prosecution of this application is hereby reopened.

Claim Objections

2. Claim 42 is objected to because of the following informalities: The second image is produced on the first surface portion. Appropriate correction is required.

It appears that applicant meant to claim that the second image is generated on a second surface portion.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 16-21, 32-38 and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Yazaki Corporation (GB 2 269 681 A.)

Yazaki teaches in figure 3 a display apparatus in a vehicle, comprising:

A projection unit (20) arranged on a vehicle roof; and

A display surface (30), which is outside the projection unit onto which a real image is generated by the projection unit (See page 12, second full paragraph which states that a real image is formed on the diffusion board.)

With regards to applicant's claim 17:

Clearly the display surface (30) is next to the windshield (1) and on the instrument panel (2).

With regards to applicant's claim 18:

Part 30 is described as a diffusion board, which would inherently be some kind of diffraction surface that would have a structural pattern.

Art Unit: 2851

With regards to applicant's claim 19:

As described in the above-cited section of page 12 and as illustrated in figure 3, the light is deflected off the board (30) onto the windshield (1) and then towards a viewer (4).

With regards to applicant's claim 20:

The windshield is a reflective surface (it partially reflects light towards the viewer).

With regards to applicant's claim 21:

The diffusion board could be considered to have a roughening of the display surface (any surface that is capable of diffusing light would be considered to have a roughening of it.)

With regards to applicant's claim 32:

The diffusion surface (30) inherently scatters light, this is how a diffusion surface functions to diffuse light (the individual photons of light scatter off the roughened surface of the diffusion surface.)

With regards to applicant's claim 33:

See above, wherein Yazaki teaches in the bottom paragraph of page 11 that the display device (21 in figure 4) is a liquid crystal display.

With regards to claims 34-38:

See above.

Art Unit: 2851

With regards to applicant's claim 41:

Clearly the path of the light from the projection unit to the display surface is approximately parallel to the windshield of the vehicle (see figure 3 for example where the light path from projection unit 20 to diffusion board 30 is parallel to the windshield 1.)

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 22 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yazaki Corporation (GB 2 269 681 A) as applied to claim 18 and 35 respectively above.

As described in more detail above Yazaki teaches among other things a display apparatus, which includes a display surface onto which a real image is generated. Yazaki in the embodiment of figure 3 that was cited above used a diffusion board rather than a holographically introduced structure on a display surface for a surface onto which a real image is generated. However Yazaki teaches in an alternative embodiment of figure 2 a version where the display surface is that of a non-regular reflection type hologram (see the bottom paragraph of page 8.) On the bottom paragraph of page 9 Yazaki teaches that this particular embodiment has the advantage that the display surface can be mounted anywhere on the instrument board and more consideration of the driver's specific sight can be taken into account. Accordingly it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the holographic structure for the display surface as it allows for some versatility in the specific disposition of the display surface.

Allowable Subject Matter

8. Claims 23-31, 40, 42 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter:

Claim 23 claims that the display surface has an outer surface with one of a prism structure and a saw tooth structure. Yazaki does not teach such a display surface; rather

Art Unit: 2851

Yazaki's surfaces are either a diffusion board (which would be a series of lines) or a holographic surface (which are a series of interference fringes recorded on photographic material). It would not be obvious to modify Yazaki to include such a surface. Claims 24-30 are indicated as being allowable if re-written in independent form including all of the limitations of base claim and any intervening claims at least due to their dependency on claim 23 and therefor for the reasons just given for claim 23.

Claim 31 claims a film that the display surface includes a film that allows directed emission of light and prevents light from being emitted towards the windshield. Since Yazaki clearly teaches a desire to emit light from the display surface towards the windshield it would not be obvious to include such a film. Accordingly claim 31 would be allowable if re-written in independent form including all of the limitations of the base claim and any intervening claims.

Claim 35, would be allowable if re-written in independent form including all of the limitations of the base claim and any intervening claims for the same reason as claim 23.

Claim 42 claims among other things that the display surface is semi-spherical and has portions for displaying first and second separate images. While Yazaki's prior art display could be conceivably considered to be semi-spherical; it does not meet the all of the limitations of independent claim 35 of which claim 42 is dependent on. Accordingly claim 42 would be allowable if re-written in independent form including all the

Art Unit: 2851

limitations of the base claim and any intervening claims, as well as correcting the objection to claim 42.

Response to Arguments

10. Applicant's arguments with respect to claims 16-22, 32-39, and 41 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments and the decision of the Board of Patent Appeals and Interferences have been noted and reviewed. However the new reference to Yazaki has been found which has been used to reject claims 16-22, 32-39, and 41 and accordingly with regards to those claims applicant's arguments are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T. Sever whose telephone number is 571-272-2128. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diane Lee can be reached on (571) 272-2399. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2851

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AS



DIANE LEE
SUPERVISORY PATENT EXAMINER



RICHARD K. SEIDEL
DIRECTOR
TECHNOLOGY CENTER 2800